

index point within the message stored on the flash memory digital recording medium; and

indexing switching means for moving between the index points to enable the user to rapidly recall indexed messages.

#### **REMARKS**

Applicant expresses appreciation to the Examiner for the consideration of the subject patent. Applicant acknowledges the changes to the numbering of claims beginning after claim 8, and will use the new reference as provided by the Examiner. The following comments are offered to overcome the rejections cited by the Office Action.

In item 4, the Office Action rejected claim 9 under 35 U.S.C. § 112, second paragraph, "as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention."

Applicant has amended claim 9 to more accurately reflect the claimed invention. Specifically, the method now includes the step of identifying each index point as a starting point of a new recording segment in a larger contiguous memory segment.

In items 6 and 7, the Office Action rejected various claims of the application on the basis of double patenting. However, "[a] timely filed disclaimer...would overcome an actual or provisional rejection...[if the] patent is shown to be commonly owned with this application."

Applicant has submitted a terminal disclaimer with this amendment. Therefore, Applicant respectfully requests withdrawal of the double patenting rejection of the claims.

In item 9, claims 1-2 are rejected under 35 U.S.C. § 103 as being "unpatentable over Barker (5,398,220). The Office Action lists allegedly similar limitations of Barker as compared to the present invention, but concludes that Barker does not teach "[a] record switch assembly."

The Office Action concludes that "it would have been obvious to one of ordinary skill in the art of dictaphone design at the time the invention was made to "substitute the single multidirectional switch design that includes "record" as taught by Barker, with a device with one or many different switch/button arrangements for functionality because it is simply a design choice that is well known in the art."

The issue under § 103 is whether the Office Action can establish a prima facie case of obviousness.

The PTO has the burden under section 103 to establish a prima facie case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.

In re Fine, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (citations omitted). In establishing a prima facie case of obviousness, the PTO "cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention." Id. at 1600. Rather, "[t]he

test is whether the claimed invention as a whole, in light of all the teachings of the references in their entireties, would have been obvious to one of ordinary skill in the art at the time the invention was made." Connell v. Sears, Roebuck & Co., 220 U.S.P.Q. 193, 199 (Fed. Cir. 1983).

Applicant respectfully submits that the prior art reference of Barker cannot properly be used to reject claim 1 of the present invention because the Office Action does not make a prima facie case of obviousness. In support of this assertion, claim 1 has been amended to include the limitation of only being applicable to a hand held recorder using flash memory as the digital recording medium. This is done to bring the claims in line with the issued parent case of Norris et al. having U.S. Patent No. 5,491,774.

To further discuss the traversal of the § 103 obviousness rejection, it is advantageous to simultaneously discuss the rejection of claims 3-4, 6-8, 9-11, and 13 in item 10. Item 10 discussed rejection of these claims in light of Barker and in view of Ball et al. (5,394,445) and Microsoft Press Computer Dictionary (Reference PTO 892). It should be noted that the Norris patent overcame the references of Ball and Microsoft.

The Office Action states that "[i]t would have been obvious to one of ordinary skill in the art to substitute the digital memory CMOS (Barker, col. 5, line 13) for the flash memory as taught by Ball because the substitution is an alternate memory that is versatile and portable. Further the substitution is well known in the art."

Applicant respectfully traverses the assertion that the substitution of flash memory for CMOS is obvious. As the Microsoft reference provided by the Office Action clearly states in the definition of flash memory, "A disadvantage of the block-oriented nature of flash memory is that it cannot be practically used as main memory (RAM) because a computer needs to be able to write to memory in single-byte increments." (Emphasis added)

The references of Barker, Ball and Microsoft thus teach away from the present invention because the present invention uses flash memory as main memory. Those skilled in the art, as demonstrated by Microsoft, would not look to replace CMOS in Barker with flash memory because of its inherent disadvantages. Therefore, because it is not obvious to replace CMOS with flash memory, those skilled in the art would not look to combine the references of Barker, Ball and Microsoft.

Applicant also respectfully submits that probably all structural elements of every invention can be found somewhere in an isolated teaching of the prior art. However, citing one element of a prior invention can not be used to reject another invention unless something in the prior art references would suggest the advantage to be derived from combining their teachings. So far, the cited references have only taught that it is a disadvantage to combine the references. Furthermore, the mere fact that the prior art could possibly be modified to make the claimed invention does not make the modifications obvious unless the prior art suggests the desirability of such a change.

Otherwise, the Office Action is claiming combining the references in light of the advantages as taught by present invention, contrary to In re Fine.

Regarding the § 103 rejection of claim 2, the Office Action states that Barker "teaches a multifunctional switch assembly including a single, manually operable rocker-pad mounted on the hand held recording device as a control switch."

Applicant respectfully submits that as claim 2 is based on amended claim 1 which is arguably allowable for the reasons given above, that the claim be passed to issue.

Regarding the § 103 rejection of claims 4, 11 and 13, the Office Action states that Barker does not specifically teach that the microcontroller includes a (ROM) for storage of instructions for executing functions.

Applicant respectfully asserts that as it is not obvious that flash memory could be used as main memory of the present invention, it is therefore not obvious that a ROM would be coupled to a device which does use flash memory with all of the limitations of the present invention. Applicant respectfully requests withdrawal of the rejection of claims 4, 11 and 13.

Regarding the § 103 rejection of claim 6, Barker "teaches a hand held recording device containing memory, but does not teach that memory as flash memory. "Ball, however, teaches a flash memory which activates a memory integrity test when initializes as a self test and initialization procedure where voice storage is processed to establish initial allocation maps of data storage."

However, it does not teach the plug in assembly for attaching a flash memory to the recording device. Nevertheless, "it would be obvious to one of ordinary skill in the art of flash memory at the time the invention was made to add to the flash memory a plug in device such as a PCMCIA slot..."

Applicant respectfully requests withdrawal of the rejection of claim 6 for the reasons given in support of claim 1 above. Applicant has arguably shown that the addition of flash memory and a PCMCIA slot to the device is not an obvious design choice because the Microsoft reference also states that "[a] disadvantage of the block-oriented nature of flash memory is that it cannot be practically used as main memory (RAM) because a computer needs to be able to write to memory in single-byte increments." (Emphasis added). The present invention uses the non-obvious structural element of flash memory as main memory for the hand held recorder. Therefore, the rejection of claim 6 should be withdrawn.

Regarding claim 7, the Office Action states that "Ball et al. teaches a method of memory integrity testing comprising testing memory segments, and marking those which are defective.

For the reasons given in support of claim 1 above, Applicant respectfully contends that claim 7 is dependent upon an allowable base claim, and therefore requests withdrawal of the rejection.

Regarding claim 8, the Office Action states that the limitations are taught by Barker, Ball and Microsoft as shown in the claim 6 and 7 rejections. Further, "Ball teaches activating

the integrity test by inserting batteries into the flash memory as a self test initialized upon application of primary power."

For the reasons given in support of claim 1 above, Applicant respectfully contends that claim 8 is dependent upon an allowable base claim, and therefore requests withdrawal of the rejection. Furthermore, primary power is not batteries as the Office Action states. Batteries are reserved for backup. It is not likely that the system of Ball was designed to be started by backup batteries. As understood by those skilled in the art, a backup power source does not typically serve as bootup power, but only serves to take over when primary power fails after the system is already on-line. It is extremely unlikely that installing backup batteries would result in the system doing self diagnostics. It is more likely that the system must be turned on with a switch to initiate this action. This action is typical of larger systems, not the small and portable hand held recorder of the present invention.

Regarding claim 10, the Office Action rejected it because "the limitations are shown in claims 1, 6, 7 and 8B...".

Applicant respectfully requests withdrawal of the rejection of claim 10 because it has been amended to reflect the arguably allowable amendments to claim 1 and the issued parent case, and therefore is not obvious as explained in the response to the rejection of claims 1, 6, 7 and 8.

In item 11, claims 5, 9, and 12 "are rejected under 35 U.S.C. § 103 as being unpatentable over Barker (5,398,220) in view of Ball (5,394,445) and Plunkett Jr. (4,468,715). The Office Action

states that it would have been obvious to combine a simple memory management scheme as allegedly taught by Plunkett with the device as taught by Barker.

Applicant respectfully traverses the rejection of claims 5, 9 and 12. The Office Action has mistakenly assumed that a flash memory digital recording medium can be operated as RAM or CMOS. The nature of flash memory is such that previously stored memory can not simply be overwritten. Flash memory must be erased before new data can be written to previously used flash memory storage segments. Furthermore, memory can only be erased in blocks. Memory management is significantly different for flash memory. Therefore, Applicant respectfully requests withdrawal of the rejection because they include the limitation of flash memory as in the issued parent case and amended claim 1.

Regarding claim 9, the Office Action states that Plunkett teaches "a method for indexing a message".

Applicant respectfully requests withdrawal of the rejection. Claim 9 had been amended to be dependent on arguably allowable base claim 5. For the reasons given in support of claim 5, Applicant respectfully requests that claim 9 also be passed to issue.

Regarding the rejection of claim 12, "Barker and Plunkett teach the limitation as described above and Plunkett further teaches an index switching means enabling the user to rapidly recall indexed messages as the operation of fast forward control and fast rewind control."

Applicant respectfully traverses the rejection of claim in light of the references. Plunkett generally stores messages on a hard disk which does not allow the nearly instantaneous access to messages provided by the present invention. The present invention jumps between indexed messages, with the jumping feature being activated by the fast forward or rewind buttons. In this instance, jumping bypasses actually playing a message rapidly in a forward or rearward direction, or even searching without playing. Instead, the index marks are jumped to directly.

In light of the above, Applicant believes that claims 1-13 are now in condition for allowance. Therefore, Applicant requests that the claims be passed to issue. If any impediment to the allowance of these claims remains after entry of this Amendment, and such impediment could be alleviated during a telephone interview, the Examiner is invited to call Vaughn W. North at (801) 566-6633 so that such matters may be resolved as expeditiously as possible.

The Commissioner is hereby authorized to charge any additional fee or to credit any overpayment in connection with this Amendment to Deposit Account No. 20-0100.

DATED this 8th day of Apr, 1996.

Respectfully Submitted,

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